

WHAT IS CLAIMED IS:

1. An on-machine-seamable fabric for use in the press section of a papermaking machine, comprising:
 - a multi-layer fabric base wherein each layer comprises
- 5 interwoven machine direction (MD) yarns and cross-machine direction (CD) yarns; the multi-layer fabric base including:
 - at least one top layer having both MD and CD yarns throughout; and
 - at least one seam layer beneath the top layer having seaming loops for seaming the fabric on the papermaking machine, thereby making the fabric on-machine-seamable; and
 - 10 a staple fiber batt attached to the top layer of said multi-layer fabric base; the staple fiber batt and top layer providing the fabric with substantially similar characteristics in a seam area above the seaming loops when seamed as the remainder of the fabric.
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2. The on-machine-seamable fabric of claim 1, wherein the substantially similar characteristics include caliper and water permeability of the fabric, thereby reducing sheet marking from the seam area.
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3. The on-machine-seamable fabric of claim 1, wherein the multi-layer fabric base is a triple layer fabric having a single top layer weave.
4. The on-machine-seamable fabric of claim 1, wherein the multi-layer fabric base is a four layer fabric having a double top layer weave.
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5. The on-machine-seamable fabric of claim 1, wherein the seaming loops are formed from the MD yarns of the at least one seam layer.
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6. The on-machine-seamable fabric of claim 1, wherein the fabric is seamed into an endless loop by interdigitating the seaming loops and inserting a pindle therein.

7. The on-machine-seamable fabric of claim 1, wherein the seaming loops are accessible through a flap cut through the staple fiber batt and top layer.

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8. The on-machine-seamable fabric of claim 1, wherein the CD yarns of the top layer over the seam area are selected to impart desired characteristics to the seam area of the fabric.

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9. The on-machine-seamable fabric of claim 1, wherein the staple fiber batt is attached to the top layer by needling.

10. The on-machine-seamable fabric of claim 1, further comprising a second staple fiber batt attached to the seam layer of the fabric base.

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11. The on-machine-seamable fabric of claim 1, wherein at least some of the yarns are polyamide, polyester, polybutylene terephthalate (PBT), or polyethylene naphthalate (PEN) yarns.

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12. The on-machine-seamable fabric of claim 1, wherein any of the yarns have a circular cross-sectional shape, a rectangular cross-sectional shape or a non-round cross-sectional shape.

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13. The on-machine seamable fabric of claim 1 which includes staple fiber batt attached to a bottom layer of said fabric.

14. An on-machine-seamable fabric for use in the press section of a papermaking machine, comprising:

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a multi-layer fabric base wherein each layer comprises interwoven machine direction (MD) yarns and cross-machine direction (CD) yarns; the multi-layer fabric base including:

at least one top layer having both MD and CD yarns woven throughout;

5 at least one seam layer beneath the top layer having seaming loops for seaming the fabric on the papermaking machine, thereby making the fabric on-machine-seamable; and wherein in said at least one top layer, at least one extra CD yarn is woven over the seaming loops.

15. The on-machine-seamable fabric of claim 14 which includes
10 a staple fiber batt attached to the top layer of said multi-layer fabric base; the staple fiber batt and top layer providing the fabric with substantially similar characteristics in a seam area above the seaming loops when seamed as the remainder of the fabric.

15 16. The on-machine-seamable fabric of claim 14, wherein the substantially similar characteristics include caliper and water permeability of the fabric, thereby reducing sheet marking from the seam area.

17. The on-machine-seamable fabric of claim 14, wherein the multi-
20 layer fabric base is a triple layer fabric having a single top layer weave and said at least one extra CD yarn is woven only in said single top layer weave.

18. The on-machine-seamable fabric of claim 14, wherein the multi-layer fabric base is a four layer fabric having a double top layer weave or two
25 single layer weaves and said at least one extra CD yarn is woven only in said double top layer weave or said two single layer weaves.

19. The on-machine-seamable fabric of claim 14, wherein the seaming loops are formed from the MD yarns of the at least one seam layer.

20. The on-machine-seamable fabric of claim 14, wherein the fabric is seamed into an endless loop by interdigitating the seaming loops and inserting a pintle therein.

5 21. The on-machine-seamable fabric of claim 14, wherein the seaming loops are accessible through a flap cut through the staple fiber batt and top layer.

10 22. The on-machine-seamable fabric of claim 14, wherein said at least one extra CD yarns is texturized yarns selected to impart desired characteristics to the seam area of the fabric.

15 23. The on-machine-seamable fabric of claim 14, wherein the staple fiber batt is attached to the top layer by needling.

24. The on-machine-seamable fabric of claim 14, further comprising a second staple fiber batt attached to the seam layer of the fabric base.

20 25. The on-machine-seamable fabric of claim 14, wherein at least some of the yarns are polyamide, polyester, polybutylene terephthalate (PBT), or polyethylene naphthalate (PEN) yarns.

25 26. The on-machine-seamable fabric of claim 14, wherein any of the yarns have a circular cross-sectional shape, a rectangular cross-sectional shape or a non-round cross-sectional shape.

27. The on-machine seamable fabric of claim 14 which includes staple fiber batt attached to a bottom layer of said fabric.